Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte LEON ZHAO
and DAVID D. KOESTER

Appeal No. 2003-0267
Application 09/427,229

ON BRIEF

Before FRANKFORT, STAAB, and MCQUADE, Administrative Patent Judges.

MCQUADE, Administrative Patent Judge.

DECISION ON APPEAL

Leon Zhao et al. originally took this appeal from the final rejection of claims 1 through 4, 7 through 10 and 19. As the appellants have since canceled claims 2, 4 and 19, the appeal now involves claims 1, 3 and 7 through 10.[1] Claims 5, 6, 11 through 18 and 20, the only other claims pending in the application, stand allowed.

[1] Claims 1 and 7 through 10 have been amended subsequent to final rejection.

THE INVENTION

The subject matter on appeal relates to "an actuator of a disc drive" (specification, page 1). Representative claim 1 reads as follows:

> 1. An actuator assembly for a disc drive comprising:
> a main body which includes a pivoting portion;
> an actuator arm attached to the main body;
> a yoke attached to the main body, the yoke having a bonding surface having a plurality of grooves therein; and
> a voice coil bonded to the yoke.

THE REJECTION

Claims 1, 3 and 7 through 10 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,734,528 to Jabbari et al. (Jabbari).

Attention is directed to the brief (Paper No. 16) and answer (Paper No. 17) for the respective positions of the appellants and examiner regarding the merits of this rejection.[2]

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[2] In the final rejection (Paper No. 9), the statutory basis for the rejection of claims 1, 3 and 7 through 10 over Jabbari was 35 U.S.C. § 103(a). The record indicates that the examiner (1) changed the statutory basis in the answer to 35 U.S.C. § 102(b) as a result of the amendment of claims 1 and 7 through 10 subsequent to final rejection, and (2) implicitly forewarned the appellants of the change in the advisory action dated February 4, 2002 (Paper No. 11). Given the argument on the merits advanced in the brief, it is apparent that the appellants have not been prejudiced by the switch in statutory basis. Claims 1, 3 and 7 through 10 also stood rejected under 35 U.S.C. § 112, second paragraph, in the final rejection. As this rejection has not been restated in the answer, we assume that it has been withdrawn by the examiner (see Ex parte Emm, 118 USPQ

DISCUSSION

Jabbari discloses a disc drive 100 comprising a casing 102, a disc 104, a spindle motor 106, an actuator arm assembly 108 including an actuator arm 118, a read/write head assembly 110, a magnetic motor coil actuator motor 112, a motor coil bobbin 114, and a plastic injection molded part 224 fixedly attaching the motor coil bobbin 114 to the actuator arm 118. Of particular relevance is the following passage from the reference describing the interface between the injection molded part and the actuating arm:

> [r]eferring, now to FIG. 2B, actuator arm 118 includes complementary locking flanges 200 and 202. Unlike the smooth, contoured and longer actuator arm flanges 120 and 121 shown in FIG. 1, each locking flange 200 and 202 contain[s] top and bottom surfaces with molded cutouts, or indentations 208, 210 and 212. In the preferred embodiment, the actuator arm 118 is formed by casting aluminum, with the cutouts formed by protrusions in the molding blocks. Those ordinarily skilled in the art will recognize the actuator arm may be formed by other means as is known in the art, such as metal injection molding, or from other materials, such as stainless steel. In the preferred embodiment the cutouts are semi-circular shape of approximately 0.062 inches in diameter and trapezoidal shape with a height of 0.040 and width of 0.030 inches, and extend to a depth of approximately 0.015 inches in the locking flanges 200 and 202. Those of ordinary skill in the art will recognize that the size and shape of the cutouts merely

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180, 181 (Bd. App. 1957)), presumably in light of the amendments made subsequent to final rejection.

> provide additional surface area to assist in the locking function, and therefore may be varied as required and are in no way limiting. Thus, the flanges can have a plurality of indentations disposed in the flange top and bottom surfaces with openings extending to the interior facing surface. Additionally, the indentations can be circular, trapezoidal, or rectangular in shape. Furthermore, the indentations disposed in the top surface with interior facing openings can be offset from the indentations with interior facing openings in the bottom surface. Also, the indentations disposed in the top and bottom surfaces with interior facing openings can have a depth of from 1/10th to 1/2 of the thickness of the flange [column 5, line 60, through column 6, line 22].

Anticipation is established only when a single prior art reference discloses, expressly or under principles of inherency, each and every element of a claimed invention. RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). It is not necessary that the reference teach what the subject application teaches, but only that the claim read on something disclosed in the reference, i.e., that all of the limitations in the claim be found in or fully met by the reference. Kalman v. Kimberly Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984).

As framed by the appellants (see page 3 in the brief), the dispositive issue in the appeal is whether Jabbari meets the limitation in independent claim 1, and the corresponding

limitation in independent claim 9, requiring "a bonding surface having a plurality of grooves therein." The examiner (see pages 3 and 4 in the answer) finds that these limitations read on Jabbari's locking flanges 200 and 202 and the indentations 208, 210 and 212 therein. The appellants counter that

> [a] groove is commonly understood to take the form of an elongate, channel-like structure, such as those illustrated in Figs. 2-5, 8 and 9 of the present specification. For example, one dictionary defines a groove as "a long narrow furrow or channel." American Heritage Dictionary 600 (3rd ed. 1993). Jabbari discloses only elements 208, 210 and 212 . . . .
>
> These indentations are described by Jabbari in column 5, lines 63-65 as "molded cutouts, or indentations" in top and bottom surfaces of an actuator. Indentations so arranged cannot reasonably be construed as "grooves," [brief, page 3].

During patent examination claims are to be given their broadest reasonable interpretation consistent with the underlying specification without reading limitations from the specification into the claims. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969). The definition of "groove" proffered by the appellants ("a long narrow furrow or channel") conforms with the underlying specification and fairly represents the ordinary and accustomed meaning of this term. This definition also fairly describes Jabbari's indentations 208, 210 and 212, which are disclosed as having a semi-circular shape of approximately 0.062 inches in diameter or a trapezoidal shape with a height of 0.040

inches and width of 0.030 inches, and as extending to a depth of approximately 0.015 inches in the locking flanges 200 and 202. So dimensioned, these indentations embody relatively long and narrow channels, and hence constitute "grooves" as broadly recited in claims 1 and 9.

Thus, the appellants' position that the bonding surface groove limitations in independent claims 1 and 9 distinguish the subject matter on appeal over that disclosed by Jabbari is not well taken. We shall therefore sustain the standing 35 U.S.C. § 102(b) rejection of claims 1 and 9, and dependent claims 3, 7, 8 and 10, as being anticipated by Jabbari.

SUMMARY

The decision of the examiner to reject claims 1, 3 and 7 through 10 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

CHARLES E. FRANKFORT Administrative Patent Judge	)
	) BOARD OF PATENT
	) APPEALS AND
LAWRENCE J. STAAB Administrative Patent Judge	) INTERFERENCES
JOHN P. MCQUADE Administrative Patent Judge	)

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